

ABSTRACT OF THE DISCLOSURE

A process for preparing polyethylene thin films is disclosed. The process comprises extruding a blend that comprises a linear low
5 density polyethylene (LLDPE) and a high molecular weight, high density polyethylene (HMW-HDPE) or high molecular weight, medium density polyethylene (HMW-MDPE). The blend has an LLDPE/HMW-HDPE or HMW-MDPE weight ratio at least 50/50. The blend is extruded through an annular die to form a molten material tube. The
10 molten material tube is then pulled around a fixed internal orientation device (FIOD) to form the film. The FIOD makes it possible to prepare polyethylene thin films from LLDPE-rich LLDPE/HMW-HDPE or HMW-MDPE blends on a high stalk film line. The films have increased machine-direction (MD) tears.